

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA

TRUCKEE RIVER BASIN, LAKE TAHOE

LOCATION.--Lat 38°55'21", long 119°59'26" referenced to North American Datum of 1927, in NW ¼ SE ¼ sec.4, T.12 N., R.18 E., El Dorado County, Hydrologic Unit 16050101, on left bank, 200 ft downstream from U.S. Highway 50 Bridge, 1.0 mi northeast of South Lake Tahoe Post Office, and 1.4 mi upstream from Lake Tahoe.

DRAINAGE AREA.--54.90 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct 1971 to Sep 1974, Oct 1976 to Jun 1977, Oct 1977 to Jun 1978, Mar 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,229.04 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr 26, 1984, at datum 2.00 ft higher. Prior to Oct 19, 1993, at site 200 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Two small dams may cause slight regulation at times. Some small diversions for domestic use upstream from station. Echo Lake conduit (station 11434500) diverts from Echo Lake (station 10336608), to South Fork American River Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,480 ft³/s, Jan 2, 1997, gage height, 9.95 ft; minimum daily, 0.01 ft³/s, Sep 6, 2001.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 16	1700	*1,180	*6.88
Jun 9	0530	548	4.60

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	3.7	24	25	e23	e24	37	92	221	537	268	27	9.2
2	2.9	24	e24	e23	e24	38	103	190	526	258	26	8.8
3	3.1	28	e23	e23	e24	38	102	208	438	237	25	8.5
4	3.2	28	e22	e23	e24	38	92	231	411	208	24	8.5
5	3.2	25	e21	e23	e24	38	91	242	415	189	23	8.5
6	3.1	24	21	e23	e24	40	112	239	358	177	22	8.0
7	3.3	24	e21	e23	e24	44	134	194	290	163	21	7.8
8	3.2	24	e21	e23	e24	48	116	215	269	156	20	7.5
9	3.1	26	e21	e23	e25	57	113	300	499	152	20	7.4
10	3.1	26	e22	e23	e25	71	100	213	423	147	19	7.4
11	3.1	27	e22	e23	e25	90	106	186	365	141	18	7.4
12	3.3	27	e22	e23	e26	103	128	184	395	131	18	7.8
13	3.7	26	e22	e23	26	111	129	221	396	126	18	7.9
14	2.7	25	e22	e23	27	103	115	295	394	115	17	7.8
15	2.9	25	e22	e23	27	91	121	345	407	100	18	7.7
16	3.4	24	e22	e23	29	85	142	807	406	78	19	9.7
17	6.4	24	e22	e23	30	79	196	608	404	71	17	22
18	e9.5	24	e22	e23	29	75	210	745	317	68	16	16
19	16	24	e22	e24	28	95	171	898	255	73	15	13
20	e17	23	e23	e24	35	105	149	933	245	64	15	13
21	18	22	e23	e24	39	94	145	917	272	56	14	20
22	18	e22	e23	e24	40	110	158	743	294	58	13	20
23	22	e22	e23	e24	38	112	172	748	284	54	13	25
24	27	e21	e23	e24	37	94	161	722	270	49	12	19
25	30	21	e23	e24	37	83	146	672	265	44	11	16
26	43	21	e23	e24	37	79	161	698	269	39	11	14
27	40	e22	e23	e24	37	92	194	732	276	37	11	20
28	42	e22	23	e24	38	116	200	734	276	34	10	19
29	32	e23	23	e24	---	100	172	657	264	32	11	24
30	31	e24	e23	e24	---	89	193	495	269	31	9.3	22
31	27	---	e23	e24	---	84	---	491	---	29	9.3	---
Total	429.9	722	695	726	827	2,439	4,224	15,084	10,489	3,385	522.6	392.9
Mean	13.9	24.1	22.4	23.4	29.5	78.7	141	487	350	109	16.9	13.1
Max	43	28	25	24	40	116	210	933	537	268	27	25
Min	2.7	21	21	23	24	37	91	184	245	29	9.3	7.4
Ac-ft	853	1,430	1,380	1,440	1,640	4,840	8,380	29,920	20,800	6,710	1,040	779

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2005, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	14.6	37.8	46.6	62.6	65.4	106	164	307	253	84.1	19.3	12.3
Max	72.1	225	218	484	307	305	300	567	795	448	102	55.3
(WY)	(1983)	(1984)	(1982)	(1997)	(1986)	(1986)	(1982)	(1982)	(1983)	(1995)	(1983)	(1983)
Min	2.60	7.36	8.07	8.00	10.5	21.2	64.0	55.3	23.5	4.65	0.51	0.55
(WY)	(1989)	(1991)	(1991)	(1991)	(1991)	(1977)	(1977)	(1977)	(1992)	(1994)	(2001)	(2001)

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA—Continued

SUMMARY STATISTICS

	Calendar Year 2004		Water Year 2005		Water Years 1972 - 2005	
Annual total	22,811.3		39,936.4			
Annual mean	62.3		109		99.3	
Highest annual mean					203	1983
Lowest annual mean					29.2	1988
Highest daily mean	340	May 5	933	May 20	3,150	Jan 2, 1997
Lowest daily mean	1.2	Sep 19	2.7	Oct 14	0.01	Sep 6, 2001
Annual seven-day minimum	1.3	Sep 9	3.1	Oct 9	0.11	Sep 5, 2001
Maximum peak flow			1,180	May 16	5,480	Jan 2, 1997
Maximum peak stage			6.88	May 16	9.95	Jan 2, 1997
Annual runoff (ac-ft)	45,250		79,210		71,950	
10 percent exceeds	184		292		265	
50 percent exceeds	25		26		37	
90 percent exceeds	2.7		9.9		6.6	

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972-74, 1978, 1980 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Mar 1981 to Sep 1983.

WATER TEMPERATURE: Oct 1971 to Jun 1974, Oct 1977 to Jun 1978, Mar 1980 to Sep 1992, Sep 1997 to Sep 2003, discontinued.

SUSPENDED-SEDIMENT DISCHARGE: Oct 1971 to Jun 1974, Oct 1977 to Jun 1978, Mar 1980 to Sep 1992.

INSTRUMENTATION.--Water temperature recorder Sep 1997 to Sep 2003, two times per hour.

REMARKS.--In Oct 1992, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Nutrient samples were analyzed by the University of California, Davis, Tahoe Research Group. Water temperature data for Sep 1997 were not published but are available from the U.S. Geological Survey, Carson City, NV. Quality assurance samples associated with the entire Lake Tahoe Interagency Monitoring Program are listed under station numbers 103366769999 and 103367309999. Hydrazine method used to determine nitrate plus nitrite concentrations (00631) was found to have interferences caused by other common ions in water samples. Values may be adjusted in the future to correct for these interferences.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 26.5°C, Jul 26 and Aug 10, 2001; minimum, freezing point on many days.

SEDIMENT CONCENTRATION: Maximum daily mean, 416 mg/L, Mar 4, 1991; minimum daily mean, 0 mg/L, several days during most years.

SEDIMENT LOAD: Maximum daily, 781 tons, Mar 8, 1986; minimum daily, 0 tons, several days during most years.

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Part 1 of 2

[Remark codes: <, less than; E, estimated.]

Date	Time	Sample type	Instan- taneous dis- charge, cfs (00061)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Ammonia Ammonia	
											+ org-N, water, fltrd, mg/L as N (00623)	+ org-N, water, unfltrd mg/L as N (00625)
Oct												
07...	1110	Environmental	4.0	--	--	--	--	129	13.5	10.5	--	.14
17...	1545	Environmental	5.9	--	--	--	--	112	7.5	8.0	.17	.32
18...	1155	Environmental	E9.5	--	--	--	--	97	3.5	5.0	.07	.20
Nov												
01...	1000	Environmental	25	--	--	--	--	60	9.0	2.0	--	.12
Dec												
07...	1630	Environmental	E21	604	11.2	97	7.5	84	.5	.0	.04	.08
Jan												
04...	1515	Environmental	E23	--	--	--	--	62	-1.5	.0	--	.15
Feb												
01...	1015	Environmental	E24	--	--	--	--	70	3.0	2.0	--	.08
Mar												
03...	1420	Environmental	38	608	10.3	99	7.5	79	6.0	4.1	.08	.10
10...	1510	Environmental	70	--	--	--	--	78	13.5	7.0	.11	.18
Apr												
07...	1055	Environmental	135	--	--	--	--	72	5.5	3.0	.12	.20
18...	1015	Environmental	206	--	--	--	--	57	4.0	2.5	.15	.28
29...	0930	Environmental	171	--	--	--	--	56	9.5	3.5	.13	.17
May												
02...	1115	Environmental	190	--	--	--	--	50	8.5	4.0	.10	.18
04...	1005	Environmental	238	--	--	--	--	40	12.5	3.5	.10	.24
05...	1155	Environmental	239	--	--	--	--	40	7.0	4.0	.08	.19
09...	1115	Environmental	313	--	--	--	--	41	1.5	1.5	.20	.26
12...	1155	Environmental	184	--	--	--	--	49	10.0	5.5	.10	.15
16...	1100	Environmental	731	--	--	--	--	27	6.5	3.0	.06	.80
17...	1525	Environmental	500	--	--	--	--	31	8.5	5.5	.14	.27
18...	1410	Environmental	873	--	--	--	--	29	9.0	8.5	.22	.37
19...	1300	Environmental	867	--	--	--	--	28	15.0	6.0	.13	.25
21...	1015	Environmental	949	613	10.1	98	6.9	24	7.5	4.8	.14	.15
24...	1140	Environmental	747	--	--	--	--	25	13.5	6.5	.12	.19
26...	1035	Environmental	723	--	--	--	--	25	14.5	6.0	.15	.16
27...	0705	Environmental	789	--	--	--	--	23	8.0	4.5	.12	.16
Jun												
02...	1050	Environmental	546	--	--	--	--	25	12.0	4.5	.11	.20
07...	1030	Environmental	306	609	10.2	100	7.1	29	9.0	5.2	.07	.12
09...	1150	Environmental	509	--	--	--	--	26	11.0	6.5	.09	.28
24...	1005	Environmental	277	--	--	--	--	28	14.5	9.5	.09	.10
Jul												
07...	1050	Environmental	165	--	--	--	--	32	15.5	12.5	.08	.12
Aug												
02...	1100	Environmental	27	--	--	--	--	68	20.5	15.0	--	.09
02...	1105	Replicate	--	--	--	--	--	--	--	--	--	.09
Sep												
14...	1135	Environmental	8.5	610	9.3	109	7.7	103	16.5	12.4	--	.07
27...	1510	Environmental	21	--	--	--	--	52	16.5	13.0	.04	.07

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Part 2 of 2

[Remark codes: <, less than; E, estimated.]

Date	Ammonia water, flt'd, mg/L as N (00608)	Nitrite + nitrate water flt'd, mg/L as N (00631)	Ortho- phos- phate, water, flt'd, mg/L as P (00671)	Phos- phorus, water, flt'd, mg/L (00666)	Phos- phorus, water, unflt'd mg/L (00665)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)
Oct								
07...	.004	.039	.004	.013	.019	--	2	.02
17...	<.003	.018	.009	.022	.025	--	6	.10
18...	<.003	.004	.004	.014	.018	--	4	E.10
Nov								
01...	.004	.010	.003	.017	.022	--	E4	E.27
Dec								
07...	.003	.012	.004	.017	.021	--	5	E.28
Jan								
04...	<.003	.011	.003	.007	.013	--	3	E.19
Feb								
01...	.003	.025	.011	.010	.018	--	4	E.26
Mar								
03...	.004	.005	.003	.009	.020	--	4	.41
10...	.007	.021	.002	.009	.029	--	11	2.1
Apr								
07...	.003	.029	.004	.013	.026	--	13	4.7
18...	.006	.024	.005	.010	.060	55	36	20
29...	.005	.024	.004	.011	.018	--	9	4.2
May								
02...	.004	.018	.003	.009	.018	--	11	5.6
04...	.005	.013	.003	.008	.047	57	28	18
05...	.004	.014	.004	.013	.029	--	17	11
09...	.006	.013	.005	.013	.063	--	62	52
12...	.004	.015	.003	.013	.025	--	71	35
16...	.005	.018	.006	.020	.258	21	569	1,120
17...	.003	.016	.005	.015	.058	--	78	105
18...	.005	.014	.010	.024	.067	30	80	189
19...	.003	.013	.007	.016	.047	--	61	143
21...	.003	.016	.007	.020	.044	45	40	102
24...	.005	.011	.005	.017	.040	--	32	65
26...	.004	.009	.005	.011	.038	--	34	66
27...	.004	.008	.006	.012	.047	--	36	77
Jun								
02...	.005	.009	.004	.016	.035	--	34	50
07...	.005	.010	.004	.014	.025	--	15	12
09...	.005	.005	.004	.015	.037	49	35	48
24...	<.003	.007	.003	.009	.019	--	8	6.0
Jul								
07...	.004	.005	.004	.013	.019	--	6	2.7
Aug								
02...	.004	.011	.005	.012	.020	--	2	.15
02...	.005	.012	.005	.011	.018	--	--	--
Sep								
14...	.003	.003	.005	.014	.020	--	3	.07
27...	.004	.003	.002	.008	.013	--	2	.11